

5 TITLE: CAP FOR SEALING A BATHTUB OVERFLOW PORT
FOR TESTING PURPOSES

CROSS REFERENCE TO RELATED APPLICATION:

This application is a continuation of U.S. Patent
10 Application Serial No. 10/247,247 filed September 19,
2002.

BACKGROUND OF THE INVENTION

In new building construction, the plumbers prefer
15 not to put the finished closure valves in the bottom of
tubs, or the finished decorative plate over the overflow
outlet at the end of the tub until the project is
finished because these elements will be often damaged as
the construction project is brought to a close.
20 Further, the piping for both of the outlets need to be
checked for leaks before the inspection process is
completed. The test involves running water down the
vent for the drain until the water reaches a level above
the tub and the tester then determines whether any of
25 the piping leaks. Thus, when the testing operation
arrives, a plug is put in the bottom drain of the tub
and some sort of a seal plate is placed at the end of
the tub on the overflow outlet.

Existing overflow plates have a center opening
30 therein. There are either two or four small screw holes
in the plate adjacent the center opening wherein two of
the holes are used to hold the plate to the plumbing
fixture. In some cases there is a fitting so that the
screw hole is located directly in the middle of the
35 access hole. In that case, that hole is in the way when
the testing procedure is implemented. In any event, the
testing procedure usually involves stuffing a balloon

5 through the large center opening into the pipe in the
wall and the pipe is sealed when the balloon is
inflated. Further, existing seal plates normally have
to be removed when putting on the decorative plate. The
decorative plate is typically held by two screws which
10 either use the screw openings of the plate or two
additional openings in the case that four holes are
provided.

Some efforts have been made to seal the overflow
ports of bathtubs with a diaphragm, and then cut the
15 diaphragm when the test is completed. (See U.S. Patent
No. 5,890,241). However, the system for including the
diaphragm sometimes involves screws and tools, and is
not always convenient to install or to remove after
testing.

20 It is therefore a principal object of this
invention to provide a seal for a bathtub overflow port
that is very easy to install for testing purposes, and
is easily made operable for overflow purposes when the
testing is finished.

25 A further object of the invention is to provide a
seal for a bathtub overflow port that is very economical
to manufacture.

These and other objects will be apparent to those
skilled in the art.

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SUMMARY OF THE INVENTION

A temporary closure means for a bathtub overflow
port, comprising placing on the outer end of a drain
pipe extending through the overflow port a solid plug
35 screwed into a threaded interior of the outer end of the
drain pipe.

5 BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a partial perspective view of a conventional bathtub environment utilizing the invention of this application;

Fig. 1A is an enlarged scale sectional view taken
10 on line 1A-1A of Fig. 1;

Fig. 2 is a perspective view of the plug of the invention; and

Fig. 3 is a sectional view of the device of Fig. 2 in an assembled operating position.

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DESCRIPTION OF THE PREFERRED EMBODIMENT OF THE INVENTION

With reference to Figs. 1 and 1A, a conventional bathroom structure 10 has a floor 12, and a hollow wall 14 with a wall opening 16 therein. A conventional
20 bathtub ("tub") 18 has a base 20 which rests upon floor 12. Sidewalls 22 extend upwardly from base 20 as does an end wall 24. A bottom 26 dwells in spaced relation to the floor 12.

A conventional drain port 28 is located in bottom
25 26. A conventional overflow port 30 is located in the end wall 24 (Fig. 2). A vertical drain pipe 32 extends downwardly from drain port 28, and overflow drain pipe 34 extends downwardly from overflow port 30. A horizontal pipe 36 connects pipes 32 and 34. A drain
30 pipe 38 extends downwardly from the junction between pipes 34 and 36.

A conventional vertical vent pipe 40 is located within the hollow wall 14. Conventional water pipes 44 extend through hollow wall 14 and are connected to valve
35 46 which is interconnected to conventional control member 48 and faucet 50.

5 With reference to Figs. 2 and 3, the numeral 52
designates a solid plug of plastic or metal material
which is comprised of an outer plate 54 which has a
solid stub 56 extending outwardly therefrom and having
an inner face 58. The stub 56 has external threads 60
10 which are adapted to match internal threads 62 of
overflow drain pipe 34. An O-ring seal or the like (not
shown) can be used to extend around the exterior of stub
56 to seal the outer portion of the plate 54 to the port
30.

15 In operation, the plug 52 of Figs. 2 and 3 is
tightly threadably inserted within the port 30 by means
of the internal threads 62 in member 34 receiving
threads 60 on the stub 56 of the plug. When the water
test is completed, the plug 52 is removed and discarded
20 (or kept for further use) and the conventional overflow
mechanism is inserted on the port.

It is therefore seen that the embodiments of this
invention achieve at least all of the stated objectives.